X-16757.ST25.txt
SEQUENCE LISTING

<110>   Applied Molecular Evolution

<120>   Fc Region Variants

<130>   X-16757

<150>   60/535,764
<151>   2004-01-12

<160>   56

<170>   PatentIn version 3.3

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<213>   Human

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Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
1               5                   10                  15


Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20                  25                  30


Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
            35                  40                  45


Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
        50                  55                  60


Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
65                  70                  75                  80


His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
                85                  90                  95


Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
                100                 105                 110


Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
            115                 120                 125


Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
            130                 135                 140


Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
145                 150                 155                 160


Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
                165                 170                 175
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Page 1

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
            180   185   190

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
            195   200   205

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    210   215

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Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
            20   25   30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
            35   40   45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
    50   55   60

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
65   70   75   80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
                85   90   95

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
            100   105   110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
        115   120   125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
    130   135   140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145   150   155   160

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
                165   170   175

Page 2

```
Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
            180                 185                 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
        195                 200                 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
    210                 215
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Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
1               5                   10                  15

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20                  25                  30

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp
        35                  40                  45

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
    50                  55                  60

Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu
65                  70                  75                  80

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
            85                  90                  95

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly
            100                 105                 110

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
        115                 120                 125

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
    130                 135                 140

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn
145                 150                 155                 160

Asn Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe
                165                 170                 175
```

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
         180   185   190

Ile Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr
         195   200   205

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
         210   215

<210> 4
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Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
1   5   10   15

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
         20   25   30

Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp
         35   40   45

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
         50   55   60

Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
65   70   75   80

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
             85   90   95

Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
             100   105   110

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu
             115   120   125

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
         130   135   140

Pro Ser Asp Ile Ala Val Glu Trp Glx Ser Asn Gly Gln Pro Glu Asn
145   150   155   160

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
                 165   170   175

Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn

                    180   185   190

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
        195   200   205

Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    210   215

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<400> 5

Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro Lys
1   5   10   15

Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val Val Val
        20   25   30

Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp Phe Val Asp
        35   40   45

Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg Glu Glu Gln Phe
    50   55   60

Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln Asp
65   70   75   80

Cys Leu Asn Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala Phe
                85   90   95

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro Lys
            100   105   110

Ala Pro Gln Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala Lys
        115   120   125

Asp Lys Val Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu Asp
    130   135   140

Ile Thr Val Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys
145   150   155   160

Asn Thr Gln Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser
                165   170   175

Lys Leu Asn Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr
                180   185   190

```
Cys Ser Val Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser
        195                 200             205

Leu Ser His Ser Pro Gly Lys
    210             215
```

<210> 6
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<400> 6

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Pro Ala Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1               5               10              15

Lys Ile Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val Thr Cys
            20              25              30

Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp
        35              40              45

Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg
    50              55              60

Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser Ala Leu Pro Ile Gln
65              70              75              80

His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
            85              90              95

Lys Asp Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
            100             105             110

Ser Val Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu
            115             120             125

Met Thr Lys Lys Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe Met
    130             135             140

Pro Glu Asp Ile Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu
145             150             155             160

Asn Tyr Lys Asn Thr Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe
            165             170             175

Met Tyr Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn
            180             185             190
```

```
Ser Tyr Ser Cys Ser Val Val His Glu Gly Leu His Asn His His Thr
        195                 200                 205
```

```
Thr Lys Ser Phe Ser Arg Thr Pro Gly Lys
    210                 215
```

<210> 7
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Pro Ala Pro Asn Leu Glu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1               5               10              15
```

```
Asn Ile Lys Asp Val Leu Met Ile Ser Leu Thr Pro Lys Val Thr Cys
        20              25              30
```

```
Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp
        35              40              45
```

```
Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg
    50              55              60
```

```
Glu Asp Tyr Asn Ser Thr Ile Arg Val Val Ser His Leu Pro Ile Gln
65              70              75              80
```

```
His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
            85              90              95
```

```
Lys Asp Leu Pro Ser Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
        100             105             110
```

```
Leu Val Arg Ala Pro Gln Val Tyr Thr Leu Pro Pro Pro Ala Glu Gln
        115             120             125
```

```
Leu Ser Arg Lys Asp Val Ser Leu Thr Cys Leu Val Val Gly Phe Asn
    130             135             140
```

```
Pro Gly Asp Ile Ser Val Glu Trp Thr Ser Asn Gly His Thr Glu Glu
145             150             155             160
```

```
Asn Tyr Lys Asp Thr Ala Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe
            165             170             175
```

```
Ile Tyr Ser Lys Leu Asn Met Lys Thr Ser Lys Trp Glu Lys Thr Asp
        180             185             190
```

```
Ser Phe Ser Cys Asn Val Arg His Glu Gly Leu Lys Asn Tyr Tyr Leu
        195                 200                 205

Lys Lys Thr Ile Ser Arg Ser Pro Gly Lys
    210                 215
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<210> 8
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<212> PRT
<213> Murine

<400> 8

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Pro Pro Gly Asn Ile Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1               5                   10                  15

Lys Pro Lys Asp Ala Leu Met Ile Ser Leu Thr Pro Lys Val Thr Cys
            20                  25                  30

Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val His Val Ser Trp
        35                  40                  45

Phe Val Asp Asn Lys Glu Val His Thr Ala Trp Thr Gln Pro Arg Glu
        50                  55                  60

Ala Gln Tyr Asn Ser Thr Phe Arg Val Val Ser Ala Leu Pro Ile Gln
65                  70                  75                  80

His Gln Asp Trp Met Arg Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
                85                  90                  95

Lys Ala Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
            100                 105                 110

Arg Ala Gln Thr Pro Gln Val Tyr Thr Ile Pro Pro Pro Arg Glu Gln
            115                 120                 125

Met Ser Lys Lys Lys Val Ser Leu Thr Cys Leu Val Thr Asn Phe Phe
    130                 135                 140

Ser Glu Ala Ile Ser Val Glu Trp Glu Arg Asn Gly Glu Leu Glu Gln
145                 150                 155                 160

Asp Tyr Lys Asn Thr Pro Pro Ile Leu Asp Ser Asp Gly Thr Tyr Phe
                165                 170                 175

Leu Tyr Ser Lys Leu Thr Val Asp Thr Asp Ser Trp Leu Gln Gly Glu
                180                 185                 190

Ile Phe Thr Cys Ser Val Val His Glu Ala Leu His Asn His His Thr
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195   200   205

Gln Lys Asn Leu Ser Arg Ser Pro Gly Lys
    210   215

<210> 9
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<400> 9

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
            20   25   30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
        35   40   45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
    50   55   60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65   70   75   80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
            85   90   95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
            100   105   110

<210> 10
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<213> Human

<400> 10

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
1   5   10   15

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
            20   25   30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
            35   40   45

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
    50   55   60

```
Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65              70              75              80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
                85              90              95

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
            100             105
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<210> 11
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<213> Human

<400> 11

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Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1               5               10              15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
            20              25              30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35              40              45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
    50              55              60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65              70              75              80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85              90              95

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
            100             105             110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
        115             120             125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
    130             135             140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145             150             155             160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
                165             170             175
```

```
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
            180                 185                 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
            195                 200                 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
    210             215                 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
225             230                 235                     240

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
                245                 250                 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
            260                 265                 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
        275                 280                 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
    290                 295                 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305                 310                 315                 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                325                 330
```

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<210>   12
<211>   330
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<213>   Human

<400>   12
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Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1               5                   10                  15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
            20                  25                  30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
    50                  55                  60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
```

65   70   75   80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85   90   95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
                100   105   110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
                115   120   125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
    130   135   140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145   150   155   160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
                165   170   175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
                180   185   190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
                195   200   205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
    210   215   220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225   230   235   240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
                245   250   255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
                260   265   270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
            275   280   285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
    290   295   300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305   310   315   320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys

325   330

<210> 13
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<213> Human

<400> 13

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

His Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20   25   30

<210> 14
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<400> 14

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Ile Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20   25   30

<210> 15
<211> 31
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<213> Human

<400> 15

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Leu Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20   25   30

<210> 16
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<400> 16

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Pro Lys Asp Thr Phe Met Ile Ser Arg Thr Pro Glu Val Thr Cys
            20   25   30

<210> 17

<211> 31
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Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Pro Lys Asp Thr Leu Met Ile Ser Arg Met Pro Glu Val Thr Cys
            20   25   30

<210> 18
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<400> 18

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1   5   10   15

Pro Lys Asp Thr Leu Met Ile Ser Arg Pro Pro Glu Val Thr Cys
            20   25   30

<210> 19
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Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
1   5   10   15

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
            20   25

<210> 20
<211> 29
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<213> Human

<400> 20

Val Val Val Asp Val Ser Glu Glu Asp Pro Glu Val Lys Phe Asn Trp
1   5   10   15

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
            20   25

<210> 21
<211> 29
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<213> Human

<400> 21

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
1   5   10   15

Tyr Val Ala Gly Val Glu Val His Asn Ala Lys Thr Lys
                20   25

<210> 22
<211> 29
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<213> Human

<400> 22

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
1   5   10   15

Tyr Val Lys Gly Val Glu Val His Asn Ala Lys Thr Lys
                20   25

<210> 23
<211> 30
<212> PRT
<213> Human

<400> 23

Cys Lys Val Ser Asn Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile
1   5   10   15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
                20   25   30

<210> 24
<211> 30
<212> PRT
<213> Human

<400> 24

Cys Lys Val Ser Asn Lys Ala Leu Pro Arg Pro Ile Glu Lys Thr Ile
1   5   10   15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
                20   25   30

<210> 25
<211> 30
<212> PRT
<213> Human

<400> 25

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Asp Glu Lys Thr Ile
1   5   10   15

```
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
            20                  25                  30
```

<210> 26
<211> 30
<212> PRT
<213> Human

<400> 26

```
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Glu Glu Lys Thr Ile
1                5                   10                  15
```

```
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
            20                  25                  30
```

<210> 27
<211> 30
<212> PRT
<213> Human

<400> 27

```
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Lys Glu Lys Thr Ile
1                5                   10                  15
```

```
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
            20                  25                  30
```

<210> 28
<211> 30
<212> PRT
<213> Human

<400> 28

```
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Arg Glu Lys Thr Ile
1                5                   10                  15
```

```
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
            20                  25                  30
```

<210> 29
<211> 30
<212> PRT
<213> Human

<400> 29

```
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
1                5                   10                  15
```

```
Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
            20                  25                  30
```

<210> 30
<211> 22
<212> PRT
<213> Human

<400> 30

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Asp Val Glu Trp Glu
1   5   10   15

Ser Asn Gly Gln Pro Glu
            20

<210> 31
<211> 23
<212> PRT
<213> Human

<400> 31

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Tyr
1   5   10   15

Leu Ser Leu Ser Pro Gly Lys
            20

<210> 32
<211> 990
<212> DNA
<213> HUMAN

<400> 32
gcctccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg   60

ggcacagcgg ccctgggctg cctggtcaag gactacttcc ccgaaccggt gacggtgtcg   120

tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca   180

ggactctact ccctcagcag cgtggtgacc gtgccctcca gcagcttggg cacccagacc   240

tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa ggttgagccc   300

aaatcttgtg acaaaactca cacatgccca ccgtgcccag cacctgaact cctgggggga   360

ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggacccct   420

gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg   480

tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac   540

agcacgtacc gtgtggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag   600

gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc   660

aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggacgag   720

ctgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc   780

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gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg      840

ctggactccg acggctcctt cttcctctat agcaagctca ccgtggacaa gagcaggtgg      900

cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg      960

cagaagagcc tctccctgtc tccgggtaaa                                       990
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<210> 33
<211> 93
<212> DNA
<213> HUMAN

<400> 33
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ctcatgatct cccggacccc tgaggtcaca tgc                                    93
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<210> 34
<211> 87
<212> DNA
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<400> 34
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gtggtggtgg acgtgagcca cgaagaccct gaggtcaagt tcaactggta cgtggacggc      60

gtggaggtgc ataatgccaa gacaaag                                           87
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<210> 35
<211> 90
<212> DNA
<213> HUMAN

<400> 35
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gtggaggtgc ataatgccaa gacaaag                                          87


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gtggaggtgc ataatgccaa gacaaag                                          87


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gtggaggtgc ataatgccaa gacaaag                                          87


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gtggaggtgc ataatgccaa gacaaag                                          87


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gggcagcccc gagaaccaca ggtgtacacc                                       90


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gggcagcccc gagaaccaca ggtgtacacc   90

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gggcagcccc gagaaccaca ggtgtacacc   90

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gggcagcccc gagaaccaca ggtgtacacc   90

<210>   54
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gggcagcccc gagaaccaca ggtgtacacc   90

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<210> 56
<211> 69
<212> DNA
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<400> 56

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